

# Sky-Walker Pro Installation Manual

Thank you for purchasing the Sky-Walker Pro plane. The Sky-Walker Pro is designed for First-Person-Vision (FPV) application specifically. Due to the high wing and pusher design, the on-board camera has a perfect view without being blocked. The large fuselage compartment design provides convenience to contain almost any hobby FPV equipment. Other than that, the Sky-Walker Pro is also suitable for the beginners to learn flying as a high stable trainer plane. Before you start the installation, please read this manual carefully to have an overall idea of what to do. In the same time, please check all parts before you begin. If you find any missing or defective parts, please contact your local dealer.

## 1, Required for Installation and Operation:

### 1.1 Required RC Equipments:

The below listed RC gears are not included. They may need to be purchased separately. For details, please check with your local hobby stop.

- Minimum 4-6 channel radio control system
- Minimum 2 pieces of 8-9g micro servos or similar. 4 servos are needed for full control of aileron, elevator and rudder
- 2 pieces of 25~30cm servo extension cables for aileron servos
- AXI 2820KV920-1100 out-runner brushless motor or equivalent
- 45-60A or above brushless ESC with 25~30cm length of the power input wire
- APC9060E propeller or equivalent
- 5000mAh 4S lithium-polymer battery pack or similar

You may need the following for FPV application:

- DC powered Camera
- Pan/tilt camera mount with servos
- 6 or more channel radio control system, instead of 3~4 channels for basic flying
- Wireless transmitter and receiver for on-board video transmission
- On-Screen-Display (OSD) system
- 1000mAh 3S lithium-polymer battery pack or similar for the camera (refer to the manual of the camera system)
- A 490-1hgfrewq

### 1.2 Required Tools and Material for Installation:

- Phillips screwdriver & allen key
- Sharp hobby knife
- Hobby scissors
- Needle nose pliers
- Wire cutters
- Awl
- Marker pen
- Foam double-sided tape
- Fibre tape
- Paper tape
- Cable tight
- Velcro tape
- Hot glue gun

Parts listing :

Step1:

Free the aileron surfaces from the wing pieces with sharp hobby knife if the aileron control is

needed. Trim off the un-necessary EPO material.

Step2:

Apply a thin layer of the EPO glue for the 2 EPO carbon tube slot covers .It is not recommended to apply glue on the contact surface between the EPO material and carbon tubes,unless you are planning to join the wing pieces permanently.

Step3:

Similarly,Apply a thin layer of the EPO glue on the wing pieces at the joint area of the 2 EPO carbon tube slot covers.

Step4:

Wait for about 1~2 minutes for the glue to solidified slightly before placing the 2 carbon tube covers.

Step5:

Insert the carbon tube, supply the glue in the carbon tube slot and click the carbon tube into the slot and pull out, wait for 2 minutes and click into the slot once again for fixing.

Step6:

Aileron servo installation: supply the EPO glue slightly on the wings of servo slots and servos, wait for 5 minutes and insert the servo equipped with pull rods and neutral point tested into the slots. So this will make tight fixing between the servo and the slot (hereinafter the same), then seal the extension cord of the servo with fiber tape into the slot.

Step7:

Junction of pull rod and rudder: slightly glue the rudder and click into, then pull out for drying and reinsert it for fixing. Connect the controller with the pull rod (screw it after finishing neutral point tested). Cut out the needless pull rod properly.

Step8:

Joint of the main wings: 2 pieces of wing layers included in the accessories bag, unnecessary to glue them on the wings. It is adaptable for 2014 Skywalker series.

Joint of the wings, glue the carbon fiber on either side of the wing and plug it for tight connection.

Step9:

Vertical tail and rudder: cut the vertical tail open with an knife, and glue the well-adjusted servor into the servo slots.

Step10:

Installation of airframe carbon tube and its extension cords: insert two pieces of extension cords into the carbon tube and place it into the carbon tube slot with glue (fixing after glue drying). Connect the two pieces of extension cords with the two servos at the end of vertical tail (use heat-shrink adapter sleeve to avoid of loose when flying ). Use adhesive tape to temporarily fix the

redundant extension cords so as to make the two pieces of airframe together.

**Step11:**

Installation of the fixed parts on the horizontal tail: drop a little AB glue into the slot and click the wood chip with 2 screws (attention: only a little glue, not too much avoid of spilling into the screw holes). Please pay attention to the direction of the screws.

**Step12:**

Screw fixing on the canopy: drop a little glue into the slot and insert the wood chip for solid fixing (please pay attention to the direction of the screws).

**Step13:**

Adhesion of the airframe: glue the adhesive area of the whole airframe slightly (checking carefully and ensuring every spot of adhesive area covered by glue). After glue drying, place the airframe vertically on the table and joint from the tail to the nose and ensure every parts of adhesion are tight and seal.

**Step14:**

Installation of rudder: insert the pull rod into the rocker arm and glue the rudder, then connect pull rod with a screw at the rudder.

**Step15:**

Installation of the horizontal tail: glue the wood chip and cut with 1mm gap on both sides of the elevator.

**Step16:**

Installation of the carbon fiber bar on horizontal tail and rudder: glue slightly into the slot and click the carbon bar and rudder into the positions when glue is drying.

**Step17:**

Installation of horizontal tail: screw two pieces of 35mm hex screws into the vertical tail with proper force. For easy carrying, you can stick up the horizontal tail in fixed position and add inclined strut for better firmness.

**Step18:**

Linkage of elevator: click the pull rod into the servo and link the pull rod with rudder with regulating screw. Then cut off the redundant part to finish the installation.

**Step19:**

Canopy: glue the wood chip and drying, fasten with 3x25mm Philips head screw.

Step20:

Installation of motor base: Screw the motor on the base with a little fixed glue, then glue slightly on the surface of motor base and sticky area. Click into position after glue drying for 5 minutes.

Step21:

Installation of wing's platforms: 2 pieces of carbon tubes. Glue the tube and insert the tube into the hole, adjust the tube for symmetry. Fixing completed when the glue is drying.

Step22:

Connection between the wings and airframe: 6 rubber bands, we need only 2 rubber bands (the rest 4 are spare for backup). Firstly connect the aileron cord and fix the rubber band on the end of carbon tube to make a V-shape to complete the whole installation. (For the beginner, the rubber band will help to reduce the impact force when landing. Rubber band is easy to install and disassemble. Rubber band can be maintained with glycerol and avoid of sunshine)

Step23: